

AMENDMENT TO CLAIMS

Claims 1-10 (Canceled)

11. (Withdrawn) A peelable stenciling ink for imprinting a surface of an article by applying said ink to said article surface, said ink comprising;

- i. a solvent,
- ii. a dye dispersable in said solvent to form a dye-solvent solution, and
- iii. a film-forming substance soluble in said dye-solvent solution and hardenable into a solid film upon evaporation of said solvent from said ink, said solid film being peelable from said article surface.

12. (Withdrawn) The ink of Claim 11 wherein said dye-solvent solution is penetratable into said article surface.

13. (Withdrawn) The ink of Claim 11 wherein said solid film formed by said film-forming substance is peelable from said article surface.

14. (Withdrawn) The ink of Claim 13 wherein said film-forming substance is a polymer.

15. (Withdrawn) The ink of Claim 13 wherein said film-forming substance is a resin.

16. (Withdrawn) The ink of Claim 11 further including a release agent for facilitating peelability of said solid film from said article surface.

17. (Withdrawn) The ink of Claim 11 wherein said solvent is further defined as being able to partially dissolve said article surface.

18. (Withdrawn) The ink of Claim 11 wherein said solvent is further defined as being able to swell said article surface.

19. (Withdrawn) The ink of Claim 11 wherein said dye comprises from about two percent to about nine percent by weight of said ink.

20. (Withdrawn) The ink of Claim 11 wherein said film-forming substance comprises from about eleven percent to about forty-six percent by weight of said ink.

21. (Withdrawn) The ink of Claim 11 wherein said solid film has a thickness of greater than about two percent of a non-evaporated layer of said ink.

1 22. (Withdrawn) A peelable stenciling ink for imprinting and dyeing a surface of an
2 article by applying said ink to said article surface, said ink comprising;

- 3 a. a solvent,
4 b. a dye dispersed in said solvent to form a dye-solvent solution capable of
5 penetrating an article surface, and
6 c. a film-forming substance soluble in said dye-solvent solution and capable
7 of holding said dye-solvent solution in contact with said article surface, and hardenable into
8 a solid, flexible film upon evaporation of said solvent from said ink, said solid film being
9 peelable from said article surface.

10 23. (Withdrawn) The ink of Claim 22 wherein said solvent consists at least in part of
11 water.

12 24. (Withdrawn) The ink of Claim 23 wherein said film-forming substance is soluble
13 in water.

14 25. (Withdrawn) The ink of Claim 24 wherein said film-forming substance consists at
15 least in part of hydroxyethyl cellulose.

16 26. (Withdrawn) The ink of Claim 24 wherein said film-forming substance consists at
17 least in part of polyvinyl alcohol.

18 27. (Withdrawn) The ink of Claim 22 wherein said solvent is a hydrocarbon.

19 28. (Withdrawn) The ink of Claim 27 wherein said film-forming substance is a polymer.

20 29. (Withdrawn) The ink of Claim 28 further including a release agent for moderating
21 adherence between said article surface and said hardened film.

22 30. (Withdrawn) The ink of Claim 28 wherein said solvent is further defined as
23 comprising about 45 percent of xylene and about 11 percent of n-butanol, relative to the total
24 weight of said ink.

25 31. (Withdrawn) The ink of Claim 30 wherein said film-forming polymer is further
26 defined as comprising about 22 percent of ethyl cellulose, relative to the total weight of said
27 ink.

1 32. (Withdrawn) The ink of Claim 31 wherein said dye is further defined as comprising
2 about 5.6 percent of the total weight of said ink.

3 33. (Withdrawn) The ink of Claim 32 wherein said dye is further defined as being an
4 azo dye.

5 34. (Withdrawn) The ink of Claim 33 further including a release agent.

6 35. (Withdrawn) The ink of Claim 34 wherein said release agent is further defined as
7 including about 11 percent mineral oil, relative to the total weight of said ink.

8 36. (Withdrawn) The ink of Claim 35 wherein said release agent is further defined as
9 including about 5.5 percent castor oil, relative to the total weight of said ink.

10 37. (Withdrawn) Peelable dye-stenciling ink for imprinting and dyeing an article
11 surface by applying said ink to said article surface, said ink being a viscous, paste-like liquid
12 comprising;

13 a. about 46 to 88 parts by weight of a solvent,

14 b. about 2-10 parts by weight of a dye dispersable in said solvent to form a
15 dye solvent solution capable of penetrating an article surface, and

16 c. about 11 to 46 parts by weight of a film-forming polymer soluble in said dye-
17 solvent solution and capable of holding said dye-solvent solution in contact with said article
18 surface, and hardenable into a solid, flexible film upon evaporation of solvent from said ink,
19 said solid film being peelable from said article surface.

20 38. (Withdrawn) The ink of Claim 37 wherein said solvent is selected from the group
21 consisting of water, ethanol, n-butanol, methanol, propanol, isopropanol, iso-butanol, amyl
22 alcohol, benzyl alcohol, hexane, cyclohexanone, methyl cyclohexanone, methyl ethyl ketone,
23 methyl isobutyl ketone, acetone, benzene, chloroform, methylene chloride, carbon
24 tetrachloride, ethylene dichloride, -butyl acetate, ethyl acetate, propyl acetate, isopropyl
25 acetate, amyl acetate, methyl cellosolve acetate, cellosolve acetate, benzyl acetate, methyl
26 formate, ethyl formate, ethyl lactate, butyl lactate, ethylene glycol, monoethyl ether, ethyl

1 ether, methyl cellosolve, cellosolve, butyl cellosolve, toluene, xylene, tetralin, dioxane and
2 pine oil.

3 39. (Withdrawn) The ink of Claim 37 wherein said dye is selected from the group
4 consisting of azo, monoazo, trisazo, polyazo, diazo, disazo, azoic, stilbene, diphenylmethane,
5 triarylmethane, acridine, azine, ketone imine, methane, nitro, nitroso, oxazine, thiazine,
6 sulphur, lactone, indigoid, quinoline, methine, thiazole, indamine, xanthene, phthalocyanine,
7 and anthraquinone.

8 40. (Withdrawn) The ink of Claim 37 wherein said dye is selected from the group
9 consisting of acid, mordant, natural dyes, food, leather, direct, reactive, solvent, pigment,
10 basic, spirit oil, vat and disperse dyes.

11 41. (Withdrawn) The ink of Claim 37 wherein said film-forming polymer is selected
12 from the group consisting of natural resins, rubber derivatives, and cellulose derivatives;
13 including cellulose esters such as cellulose nitrate, cellulose acetate, cellulose acetate-
14 butyrate and cellulose propionate and cellulose ethers such as methyl cellulose, ethyl
15 cellulose and carboxymethyl cellulose, varnishes, synthetic resins, alkyd resins and those
16 resins formed by condensation polymerization such as phenolic resins, amino resins,
17 polyesters, polyurethanes, polyamides, epoxides and polyethers; polyethylene, polypropylene,
18 polyisobutylene, fluorocarbon polymers, polyvinyl acetate and its derivatives such as polyvinyl
19 alcohol, vinyl polymers and copolymers, vinyl chloride polymers and copolymers,
20 polyvinylidene chloride, polystyrene, acrylic polymers, coumarone-indene polymers, polyvinyl
21 ethers, polyvinyl ketones, polyvinyl amines, fluorine-containing polymers and divinyl polymers;
22 epoxy resins and synthetic rubbers and silicones and their derivatives.

23 42. (Withdrawn) The ink of Claim 37 further including a release agent for moderating
24 adhesion of said solid film to said article surface.

25 43. (Withdrawn) The ink of Claim 42 wherein said release agent is selected from the
26 group consisting of mineral oil, linseed oil, castor oil, silicone polymers, synthetic waxes,
27
28

1 unsaturated fatty acid-monoamides, polyethylene glycol monostearate, fatty bisamides, and
2 various plasticizers.

3 44. (Amended)) A method for imprinting indicia markings onto a surface of an object,
4 the markings penetrating beneath said object surface to thereby impart abrasion and wear
5 resistance to said markings, said method comprising the steps of;

6 a. securing in fluid-tight contact to said object surface a stencil plate having
7 through a thickness dimension thereof openings having outline shapes corresponding to
8 indicia to be imprinted on said object surface by a semi-liquid peelable ink, said ink
9 comprising,

10 I. a solvent

11 ii. a dye ~~solutilized~~ solubilized in said solvent to form a dye-solvent
12 solution penetrable into said object surface, and

13 iii. a film forming substance,

14 b. applying said ink to an obverse side of said stencil sheet and through said
15 opening through said stencil sheet onto said object surface, said applied ink extending
16 beyond said open areas onto adjacent areas of said stencil sheet to thereby form a
17 continuous layer having an outer surface which overlies said openings and adjacent areas of
18 said stencil sheet, and an inner surface which contacts said object surface, said layer having
19 a thickness sufficient to adhere when formed into a solid film sufficiently strongly to said
20 stencil plate to enable said layer to be peelable en masse with said stencil plate from dye-
21 imprinted portions of said object surface.

22 c. allowing sufficient time for said dye to penetrate said object surface,

23 d. allowing sufficient time for said solvent to evaporate and cause said film-
24 forming substance to form a solid film peelable from said object surface, and

25 e. peeling said stencil plate and said solid film *en masse* from said object
26 surface thereby removing said solid film from and thereby exposing said object surface
27 bearing said indicia markings imprinted on and dye-penetrated into said object surface.
28

1 45. (Previously Presented) The method of Claim 44 wherein said stencil sheet is
2 conformed in fluid-tight contact with said object surface by means of a pressure-sensitive
3 adhesive layer between said object surface and a reverse side of said stencil sheet.

4 46. (Previously Presented) The method of Claim 44 wherein said film-forming substance
5 is further defined as forming upon said evaporation of said solvent a film which is sufficiently
6 lightly adhered to said object surface to be peelable therefrom without damaging said object
7 surface, and sufficiently tightly adhered to said stencil sheet to remain attached thereto when
8 said stencil sheet is peeled from said object surface.

9 47. (Previously Presented) The method of Claim 44 wherein said film-forming substance
10 is further defined as a polymer soluble in said dye-solvent solution.

11 48. (Previously Presented) The method of Claim 44 wherein the material of which said
12 object surface is made is further defined as being a leather.

13 49. (Previously Presented) The method of Claim 44 wherein the material of which said
14 object surface is made is further defined as being a polymer.

15 50. (Previously Presented) The method of Claim 49 wherein said polymer is further
16 defined as being a thermoplastic.

17 51. (Previously Presented) The method of Claim 44 wherein said applied layer of ink
18 has a thickness ranging from about 0.5 millimeters to about 10 millimeters.

19 52. (Previously Presented) The method of Claim 44 wherein said applied layer of ink
20 has a thickness ranging from about 1 millimeter to about 5 millimeters.

21 53. (Previously Presented) The method of Claim 44 wherein said solid film has a
22 thickness ranging from about 5 percent to about 25 percent of the thickness of said ink layer
23 when said ink layer is wet.

24 54. (Previously Presented) The method of Claim 44 wherein said ink is further defined
25 as comprising;

26 a. a solvent,

27 b. a dye dispersable in said solvent to form a dye-solvent solution, and
28

1 c. a film-forming substance soluble in said dye-solvent solution and
2 hardenable into a solid film upon evaporation of said solvent from said ink, said solid film
3 being peelable from said article surface.

4 55. (Previously Presented) The method of Claim 54 wherein said dye-solvent solution
5 is penetratable into said article surface.

6 56. (Previously Presented) The method of Claim 54 wherein said solid film formed by
7 said film-forming substance is peelable from said article surface.

8 57. (Previously Presented) The method of Claim 56 wherein said film-forming substance
9 is a polymer.

10 58. (Previously Presented) The method of Claim 56 wherein said film-forming substance
11 is a resin.

12 59. (Previously Presented) The method of Claim 44 further including a release agent
13 for facilitating peelability of said solid film from said article surface.

14 60. (Previously Presented) The method of Claim 44 wherein said solvent is further
15 defined as being able to partially dissolve said article surface.

16 61 (Previously Presented) The method of Claim 44 wherein said solvent is further
17 defined as being able to swell said article surface.

18 62. (Previously Presented) The method of Claim 44 wherein said dye comprises from
19 about two percent to about nine percent by weight of said ink.

20 63. (Previously Presented) The method of Claim 44 wherein said film-forming substance
21 comprises from about eleven percent to about forty-six percent by weight of said ink.

22 64. (Previously Presented) The method of Claim 44 wherein said solid film has a
23 thickness of greater than about two percent of a non-evaporated layer of said ink.

24 65. (Previously Presented) The method of Claim 44 wherein said ink is further defined
25 as comprising;

26 a. a solvent,

1 b. a dye dispersed in said solvent to form a dye-solvent solution capable of
2 penetrating an article surface, and

3 c. a film-forming substance soluble in said dye-solvent solution and capable
4 of holding said dye-solvent solution in contact with said article surface, and hardenable into
5 a solid, flexible film upon evaporation of said solvent from said ink, said solid film being
6 peelable from said article surface.

7 66. (Previously Presented) The method of Claim 65 wherein said solvent consists at
8 least in part of water.

9 67. (Previously Presented) The method of Claim 66 wherein said film-forming substance
10 is soluble in water.

11 68. (Previously Presented) The method of Claim 67 wherein said film-forming substance
12 consists at least in part of hydroxyethyl cellulose.

13 69. (Previously Presented) The method of Claim 67 wherein said film-forming substance
14 consists at least in part of polyvinyl alcohol.

15 70. (Previously Presented) The method of Claim 65 wherein said solvent is a
16 hydrocarbon.

17 71. (Previously Presented) The method of Claim 70 wherein said film-forming substance
18 is a polymer.

19 72. (Previously Presented) The method of Claim 71 further including a release agent for
20 moderating adherence between said article surface and said hardened film.

21 73. (Previously Presented) The method of Claim 71 wherein said solvent is further
22 defined as comprising about 45 percent of xylene and about 11 percent of n-butanol, relative
23 to the total weight of said ink.

24 74 (Previously Presented) The method of Claim 73 wherein said film-forming polymer
25 is further defined as comprising about 22 percent of ethyl cellulose, relative to the total weight
26 of said ink.

1 75. (Previously Presented) The method of Claim 74 wherein said dye is further defined
2 as comprising about 5.6 percent of the total weight of said ink.

3 76. (Previously Presented) The method of Claim 75 wherein said dye is further defined
4 as being an azo dye.

5 77. (Previously Presented) The method of Claim 76 further including a release agent.

6 78. (Previously Presented) The method of Claim 77 wherein said release agent is
7 further defined as including about 11 percent mineral oil, relative to the total weight of said ink.

8 79. (Previously Presented) The method of Claim 78 wherein said release agent is
9 further defined as including about 5.5 percent castor oil, relative to the total weight of said ink.

10 80. (Previously Presented) The method of Claim 44 wherein said ink is further defined
11 as being a viscous, paste-like liquid comprising;

12 a. about 46 to 88 parts by weight of a solvent,

13 b. about 2-10 parts by weight of a dye dispersable in said solvent to form a
14 dye solvent solution capable of penetrating an article surface, and

15 c. about 11 to 46 parts by weight of a film-forming polymer soluble in said dye-
16 solvent solution and capable of holding said dye-solvent solution in contact with said article
17 surface, and hardenable into a solid, flexible film upon evaporation of solvent from said ink,
18 said solid film being peelable from said article surface.

19 81. (Previously Presented) The method of Claim 80 wherein said solvent is selected
20 from the group consisting of water, ethanol, n-butanol, methanol, propanol, isopropanol, iso-
21 butanol, amyl alcohol, benzyl alcohol, hexane, cyclohexanone, methyl cyclohexanone, methyl
22 ethyl ketone, methyl isobutyl ketone, acetone, benzene, chloroform, methylene chloride,
23 carbon tetrachloride, ethylene dichloride, -butyl acetate, ethyl acetate, propyl acetate,
24 isopropyl acetate, amyl acetate, methyl cellosolve acetate, cellosolve acetate, benzyl acetate,
25 methyl formate, ethyl formate, ethyl lactate, butyl lactate, ethylene glycol, monoethyl ether,
26 ethyl ether, methyl cellosolve, cellosolve, butyl cellosolve, toluene, xylene, tetralin, dioxane
27 and pine oil.

1 82. (Previously Presented) The method of Claim 80 wherein said dye is selected from
2 the group consisting of azo, monoazo, trisazo, polyazo, diazo, disazo, azoic, stilbene,
3 diphenylmethane, triarylmethane, acridine, azine, ketone imine, methane, nitro, nitroso,
4 oxazine, thiazine, sulphur, lactone, indigoid, quinoline, methine, thiazole, indamine, xanthene,
5 phthalocyanine, and anthraquinone.

6 83. (Previously Presented) The method of Claim 80 wherein said dye is selected from
7 the group consisting of acid, mordant, natural dyes, food, leather, direct, reactive, solvent,
8 pigment, basic, spirit oil, vat and disperse dyes.

9 84. (Previously Presented) The method of Claim 80 wherein said film-forming polymer
10 is selected from the group consisting of natural resins, rubber derivatives, and cellulose
11 derivatives; including cellulose esters such as cellulose nitrate, cellulose acetate, cellulose
12 acetate-butyrate and cellulose propionate and cellulose ethers such as methyl cellulose, ethyl
13 cellulose and carboxymethyl cellulose, varnishes, synthetic resins, alkyd resins and those
14 resins formed by condensation polymerization such as phenolic resins, amino resins,
15 polyesters, polyurethanes, polyamides, epoxides and polyethers; polyethylene, polypropylene,
16 polyisobutylene, fluorocarbon polymers, polyvinyl acetate and its derivatives such as polyvinyl
17 alcohol, vinyl polymers and copolymers, vinyl chloride polymers and copolymers,
18 polyvinylidene chloride, polystyrene, acrylic polymers, coumarone-indene polymers, polyvinyl
19 ethers, polyvinyl ketones, polyvinyl amines, fluorine-containing polymers and divinyl polymers;
20 epoxy resins and synthetic rubbers and silicones and their derivatives.

21 85. (Previously Presented) The method of Claim 80 further including a release agent
22 for moderating adhesion of said solid film to said article surface.

23 86. (Previously Presented) The method of Claim 85 wherein said release agent is
24 selected from the group consisting of mineral oil, linseed oil, castor oil, silicone polymers,
25 synthetic waxes, unsaturated fatty acid-monoamides, polyethylene glycol monostearate, fatty
26 bisamides, and various plasticizers